



Michigan Refining Division

Marathon Petroleum Company LP

1300 South Fort Street
Detroit, MI 48217
Telephone 313/843-9100

VIA FEDERAL EXPRESS

July 22, 2011

Ms. Teresa Seidel
Michigan DNRE – Air Quality Division
3058 West Grand Blvd.
Suite 2-300
Detroit, MI 48202

**Re: Continuous Emissions Monitoring System Reports for the Second Quarter
2011; Marathon Petroleum Company LP – Michigan Refining Division**

Dear Ms. Seidel:

This report contains information and data related to continuous emissions monitoring systems (CEMS) at Marathon Petroleum Company LP's (MPC's) Michigan Refining Division (MRD) for the second quarter 2011. These reports are submitted pursuant to the General Provisions of the federal New Source Performance Standards (40 CFR 60.7) and Rule 1170 of the Michigan Air Pollution Control Rules. In addition, this report contains information required by the first modification to the November 2005 First Revised NSR Consent Decree, United States of America et. al. v. Marathon Petroleum Company LLC (Civil Action No. 4:01CV-40119-PVG), lodged February 7, 2008 and entered on March 31, 2008. This report is divided into four attachments as follows:

Appendix A – CEMS downtime and excess emissions summary reports pursuant to 40 CFR 60.7(d) for all environmental analyzers at the Refinery. The CEMS did not exceed the downtime limit of 5%. The excess emission limit of 1% was exceeded at the Sulfur Plant (SRU) Thermal Oxidizer.

Appendix B - New Source Performance Standards (NSPS) Subpart J Alternate Monitoring Plan (AMP) data for seven streams: (1) Alky Spent Caustic H₂S, (2) CCR/SR Recycle H₂ H₂S, (3) DHT/Unifiner Recycle H₂ H₂S, (4) FCCU Disulfide off-gas H₂S, (5) CP Spent Caustic Drum Vent H₂S, (6) SR Aromatics Sump Vent H₂S, and (7) CCR Chlorsorb Vent SO₂.

The Refinery has five additional AMPs for which no data is being submitted: (1) The Crude Spent Caustic Drum was permanently shutdown, (2) The BT Recycle Hydrogen, which was part of the BT Platformer unit, was permanently shutdown in September 2005, (3) CCR Lockhopper Vent Gas which currently cannot physically be vented to the flare or fuel system, (4) Propylene Deethanizer off-gas, and (5) Alky Deethanizer off-gas were re-routed to a location that the refinery's fuel gas H2S analyzer will receive the streams.

All AMPs were obtained in accordance with the NSPS General Provisions (40 CFR §60.13(i)).

Appendix C – Data from cylinder gas audits performed on CEMS located on the exhaust of the B&W Boiler, Crude and Vacuum Heaters, CCR Charge Heater, SRU Thermal Oxidizer, East Plant H2S, West Plant H2S, FCCU Regenerator, FCC Charge Heater, and the Zurn Boiler.

Appendix D – Excess Emission Report for the SRU Incinerator SO2 exceedence of 1% excess emissions.

In October 2009 MDEQ requested MRD conduct a Calibration Gas Audit (CGA) on the Zurn O2 analyzer. MRD's stance has been that this analyzer does not apply to Appendix F, including the CGA which is detailed in Section 5 of Appendix F. However, MRD agreed to begin conducting quarterly CGAs starting first quarter 2010. The CGAs were conducted on the Zurn O2 analyzer successfully in all quarters of 2010, First and Second Quarters of 2011; although, the oxygen cylinders used to conduct the CGAs were not EPA protocol gases. MRD does not feel this is a violation, since the rule is not applicable. MRD will continue to utilize the current oxygen cylinder unless directed differently by your office.

Please note, under the refinery's Title V permit in Table E-1.3, Section III.A.1 it indicates that quarterly cylinder gas audits of the FCCU opacity monitor are required; however, a quarterly cylinder gas audit program does not exist for this type of analyzer. The refinery is maintaining the analyzer according to the PTI 28-02A and completing a yearly audit of the analyzer. The refinery has requested a wording modification in the Title V renewal.

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information in Appendices A through D of this submittal is, to the best of my knowledge and belief, true, accurate, and complete. Please contact Tabetha Daum at (313) 297-4701 if you have any questions concerning this submittal.

Sincerely,

Marathon Petroleum Company LP

By: MPC Investment LLC, General Partner



Mr. C.T. Case, Deputy Assistant Secretary

Attachments

cc: Technical Programs Unit - MDNRE: AQD – c/o Karen Kajiya-Mills – *Federal Express*

Chief, Environmental Enforcement Section, Environment and Natural Resources Division,
U.S. DOJ - *Federal Express*

U.S. EPA, Director of Air Enforcement Division c/o Matrix Environmental and Geotechnical–
Federal Express

Air and Radiation Division, U.S. EPA Region 5 – *Federal Express*

Office of Regional Counsel, U.S. EPA Region 5 – *Federal Express*

MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT
REPORT CERTIFICATION**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Natural Resources and Environment, Air Quality Division upon request.

Source Name Marathon Petroleum Company LP County Wayne

Source Address 1300 South Fort Street City Detroit

AQD Source ID (SRN) A9831 ROP No. 199700013c ROP Section No. 01

Please check the appropriate box(es):

☐ **Annual Compliance Certification (Pursuant to Rule 213(4)(c))**

Reporting period (provide inclusive dates): From _____ To _____

- ☐ 1. During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.
- ☐ 2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, **EXCEPT** for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

☐ **Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**

Reporting period (provide inclusive dates): From _____ To _____

- ☐ 1. During the entire reporting period, **ALL** monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.
- ☐ 2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, **EXCEPT** for the deviations identified on the enclosed deviation report(s).

☒ **Other Report Certification**

Reporting period (provide inclusive dates): From 4/1/2011 To 6/30/2011

Additional monitoring reports or other applicable documents required by the ROP are attached as described:

2nd Quarter 2011 Continuous Emission Monitoring (CEMS) Downtime and Excess Emission
Report.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

MPC Investment LLC,
its General Partner
Deputy Assistant Secretary


C.T. Case

Name of Responsible Official (print or type)

Title

313-843-9100

Phone Number


Signature of Responsible Official

7-21-11
Date

Appendix A

CEMS Downtime and Excess Emissions Summary Reports

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.20 lbs/MMBTU

Emission Unit: BW Boiler

Average Time: daily average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>2.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.09</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 400 ppm

Emission Unit: BW Boiler (CO)

Average Time: daily average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>0.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>0.00</u> hrs
C. Process Problems <u>0.00</u> hrs	C. QA Calibration <u>2.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>0.00</u> hrs	2. Total Duration <u>2.00</u> hrs
3. Percent of Total Excess Emissions <u>0.00</u> %	3. Percent of Total CEM Downtime <u>0.09</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: BW Boiler (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>2.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.09</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 123 ppm

Average Time: 7 day average

Emission Unit: FCCU Regenerator

Emission Limit: 93 ppm

Average Time: 365 day average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>25.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>5.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>30.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>1.37</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 500 ppm

Average Time: one hour average

Emission Unit: FCCU Regenerator

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr> <td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. Process Problems</td><td><u>1.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>1.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.05</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>1.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr> <td>A. Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Non- Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. QA Calibration</td><td><u>25.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>5.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>30.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>1.37</u> %</p>	A. Monitor Malfunction	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>25.00</u> hrs	D. Other Known Causes	<u>5.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>1.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>0.00</u> hrs																				
B. Non- Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>25.00</u> hrs																				
D. Other Known Causes	<u>5.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Magnos 16 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Average Time: none

Emission Unit: FCCU Regenerator

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr> <td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. Process Problems</td><td><u>0.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr> <td>A. Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Non- Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. QA Calibration</td><td><u>25.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>5.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>30.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>1.37</u> %</p>	A. Monitor Malfunction	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>25.00</u> hrs	D. Other Known Causes	<u>5.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>0.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>0.00</u> hrs																				
B. Non- Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>25.00</u> hrs																				
D. Other Known Causes	<u>5.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO2 NOx CO CO2 O2 TRS H2S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Limas 11 (SO2)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Unit: FCCU Regenerator

Emission Limit: 70 ppm

Average Time: 7 day average

Emission Limit: 35 ppm

Average Time: 365 day average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr><td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr><td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr><td>C. Process Problems</td><td><u>0.00</u> hrs</td></tr> <tr><td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr><td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr><td>A. Monitor Malfunction</td><td><u>22.00</u> hrs</td></tr> <tr><td>B. Non- Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr><td>C. QA Calibration</td><td><u>25.00</u> hrs</td></tr> <tr><td>D. Other Known Causes</td><td><u>5.00</u> hrs</td></tr> <tr><td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>52.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>2.38</u> %</p>	A. Monitor Malfunction	<u>22.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>25.00</u> hrs	D. Other Known Causes	<u>5.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>0.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>22.00</u> hrs																				
B. Non- Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>25.00</u> hrs																				
D. Other Known Causes	<u>5.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Lighthawk 560

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Teledyne Monitor Labs

Emission Limit: 20% opacity

Average Time: 6 minute average

Emission Unit: FCCU Regenerator

Total Operating Hours of Emission Unit: 2184 hrs.

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>2.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>5.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>2.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.09</u> %	3. Percent of Total CEM Downtime	<u>0.32</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: 2000GC

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 162 ppm

Average Time: 3 hour average

Emission Unit: West Plant Fuel Gas NSPS Heaters

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>8.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>8.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.37</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: 2000 Vista II

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 162 ppm

Average Time: 3 hour average

Emission Unit: East Plant Fuel Gas NSPS Heaters

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>1.00</u> hrs
C. Process Problems	<u>3.00</u> hrs	C. QA Calibration	<u>6.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>3.00</u> hrs	2. Total Duration	<u>7.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.14</u> %	3. Percent of Total CEM Downtime	<u>0.32</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: ENDA-1120

Facility: Marathon Petroleum Company LLC

Manufacturer: Horiba

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 0.2 lbs/MMBTU

Average Time: 24 hour average

Emission Unit: Zurn Boiler

Total Operating Hours of Emission Unit: 1703 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr> <td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. Process Problems</td><td><u>0.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr> <td>A. Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Non- Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. QA Calibration</td><td><u>2.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>2.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>0.12</u> %</p>	A. Monitor Malfunction	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>0.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>0.00</u> hrs																				
B. Non- Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>2.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: ZA8

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Yokagowa

Emission Limit: none

Average Time: none

Emission Unit: Zurn Boiler

Total Operating Hours of Emission Unit: 1703 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>2.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.12</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO2 NOx CO CO2 O2 TRS H2S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: LIMAS-11-UV

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB Advance Optima

Emission Limit: 250 ppm

Average Time: 12 hour average

Emission Unit: Sulfur Recovery Unit Thermal Oxidizer

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>1.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>29.00</u> hrs	C. QA Calibration	<u>14.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>29.00</u> hrs	2. Total Duration	<u>15.00</u> hrs
3. Percent of Total Excess Emissions	<u>1.33</u> %	3. Percent of Total CEM Downtime	<u>0.69</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: MAGNOS 106/206

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB Advance Optima

Emission Limit: none

Average Time: none

Emission Unit: Sulfur Recovery Unit Thermal Oxidizer

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
<p>1. Duration of Excess Emissions</p> <p>A. Startup/Shutdown <u>0.00</u> hrs</p> <p>B. Control Equipment <u>0.00</u> hrs</p> <p>C. Process Problems <u>0.00</u> hrs</p> <p>D. Other Known Causes <u>0.00</u> hrs</p> <p>E. Unknown Causes <u>0.00</u> hrs</p> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	<p>1. Duration of CEM Downtime During Source Operation</p> <p>A. Monitor Malfunction <u>1.00</u> hrs</p> <p>B. Non- Monitor Malfunction <u>0.00</u> hrs</p> <p>C. QA Calibration <u>14.00</u> hrs</p> <p>D. Other Known Causes <u>0.00</u> hrs</p> <p>E. Unknown Causes <u>0.00</u> hrs</p> <p>2. Total Duration <u>15.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>0.69</u> %</p>

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 400 ppm

Average Time: daily average

Emission Unit: CCR Charge Heater (CO)

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr> <td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. Process Problems</td><td><u>0.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr> <td>A. Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Non- Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. QA Calibration</td><td><u>2.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>2.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>0.09</u> %</p>	A. Monitor Malfunction	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>0.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>0.00</u> hrs																				
B. Non- Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>2.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Average Time: none

Emission Unit: CCR Charge Heater (O₂)

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr> <td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. Process Problems</td><td><u>0.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr> <td>A. Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Non- Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. QA Calibration</td><td><u>2.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>2.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>0.09</u> %</p>	A. Monitor Malfunction	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>0.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>0.00</u> hrs																				
B. Non- Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>2.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 400 ppm

Average Time: 1 hour average

Emission Unit: FCCU Charge Heater

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>48.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>4.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>52.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>2.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Average Time: none

Emission Unit: FCCU Charge Heater

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>48.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>4.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>52.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>2.38</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Average Time: annual rolling average

Emission Unit: Crude/Vacuum Charge Heater

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>39.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>41.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>1.88</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2011

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Average Time: none

Emission Unit: Crude/Vacuum Charge Heater (O₂)

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>39.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>0.00</u> hrs
C. Process Problems <u>0.00</u> hrs	C. QA Calibration <u>2.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>0.00</u> hrs	2. Total Duration <u>41.00</u> hrs
3. Percent of Total Excess Emissions <u>0.00</u> %	3. Percent of Total CEM Downtime <u>1.88</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2011

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Powertrol

Emission Limit: Pilot Light Present

Average Time: continuously

Emission Unit: Vents to CP Flare

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>12.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>12.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.55</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2011

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Powertrol

Emission Limit: Pilot Light Present

Average Time: continuously

Emission Unit: Vents to Alkylation Unit Flare

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>0.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.00</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2011

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Powertrol

Emission Limit: Pilot Light Present

Average Time: continuously

Emission Unit: Vents to Unifiner Flare

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>5.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>5.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.23</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2011

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Powertrol

Emission Limit: Pilot Light Present

Average Time: continuously

Emission Unit: Vents to Crude Flare

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>11.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>11.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.50</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Appendix B

New Source Performance Standards (NSPS) Subpart J Alternate Monitoring Plan (AMP) Data

Alternative Monitoring Plan Data

Complex 2 (AMP Sheet) - A		Complex 4 (Lab Data)	Complex 2 (Lab Data)
Date	Alky Spent Caustic H2S ppm When flaring	CCR/SR Recycle H2 H2S ppm 2 x year	DHT/Unifiner Recycle H2 H2S ppm 5 x week
4/1/2011		<1	<1
4/2/2011		<1	<1
4/3/2011		<1	<1
4/4/2011		<1	<1
4/5/2011		<1	<1
4/6/2011		<1	<1
4/7/2011		<1	<1
4/8/2011		<1	<1
4/9/2011		<1	<1
4/10/2011		<1	<1
4/11/2011		--	<1
4/12/2011		<1	<1
4/13/2011		<1	<1
4/14/2011		<1	<1
4/15/2011		<1	<1
4/16/2011		<1	<1
4/17/2011		<1	<1
4/18/2011		<1	<1
4/19/2011		<1	<1
4/20/2011		<1	<1
4/21/2011		<1	<1
4/22/2011		<1	<1
4/23/2011		<1	<1
4/24/2011		<1	<1
4/25/2011		<1	<1
4/26/2011		<1	<1
4/27/2011		<1	<1
4/28/2011		<1	<1
4/29/2011		<1	<1
4/30/2011		<1	<1
5/1/2011		<1	15
5/2/2011		<1	<1
5/3/2011		<1	<1
5/4/2011		<1	<1
5/5/2011		<1	<1
5/6/2011		<1	<1
5/7/2011		<1	<1
5/8/2011		<1	<1
5/9/2011		<1	<1
5/10/2011		<1	<1
5/11/2011		<1	<1
5/12/2011		<1	<1
5/13/2011		<1	<1
5/14/2011		<1	<1
5/15/2011		<1	<1
5/16/2011		<1	<1
5/17/2011		<1	<1
5/18/2011		<1	<1
5/19/2011		<1	<1
5/20/2011		<1	<1
5/21/2011		<1	<1
5/22/2011		<1	<1
5/23/2011		<1	<1
5/24/2011		<1	<1
5/25/2011		<1	<1
5/26/2011		<1	<1
5/27/2011	0	<1	<1
5/28/2011		<1	<1
5/29/2011		<1	<1
5/30/2011		<1	<1
5/31/2011		<1	<1

Alternative Monitoring Plan Data

6/1/2011	<1	<1
6/2/2011	<1	<1
6/3/2011	<1	<1
6/4/2011	<1	<1
6/5/2011	<1	<1
6/6/2011	<1	10
6/7/2011	<1	<1
6/8/2011	<1	<1
6/9/2011	<1	<1
6/10/2011	<1	<1
6/11/2011	<1	<1
6/12/2011	<1	104
6/13/2011	<1	--
6/14/2011	<1	3201
6/15/2011	<1	401
6/16/2011	<1	3177
6/17/2011	<1	<1
6/18/2011	<1	20
6/19/2011	<1	<1
6/20/2011	<1	<1
6/21/2011	<1	<1
6/22/2011	<1	30
6/23/2011	<1	<1
6/24/2011	<1	50
6/25/2011	<1	<1
6/26/2011	<1	<1
6/27/2011	<1	65
6/28/2011	<1	30
6/29/2011	<1	<1
6/30/2011	--	10

*No flaring occurred.

Complex 3 (RADAR) - B		Complex 3 (RADAR) - C		Complex 4 (AMP Sheet) - D		Complex 4 (AMP Sheet) - E	
Most Recent Sample Dates	FCCU Disulfide off-gas H2S ppm 2 x year	Most Recent Sample Dates	CP Spent Caustic Drum Vent H2S ppm 2 x year	Most Recent Sample Dates	SR Aromatics Sump Vent H2S ppm 2 x year	Most Recent Sample Dates	CCR Chlorsorb Vent SO2 ppm 2 x year
1/4/2011	0	1/4/2011	0	3/31/2011	0	3/30/2011	0
5/4/2011	0	5/5/2011	0	6/30/2011	0	6/29/2011	0

Appendix C

Cylinder Gas Audit Information

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: B&W Boiler CEMS

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas 11 (NOx), Magnos 106 (O2), Uras 14 (CO)

Constituents monitored (w/ranges): NOx (0-500), CO (0-500), O2 (0-10%)

Date CGA performed: 4/12/2011

Performed by: Doug Pek and Bryan Longtine

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	NO	low	CC320264	01/08/12	128	ppm
76-188-232	CO	low	CC320264	01/08/12	125	ppm
76-188-219	O2	low	EB0017910	01/18/14	5.55	%
76-188-231	NO	mid	EB0014905	10/08/12	270	ppm
76-188-231	CO	mid	EB0014905	10/08/12	274	ppm
76-188-215	O2	mid	SA14533	04/25/11	9.13	%

Low-level CGA:

Start time	End time	NO	CO	O2
12:35	12:47	126	125	5.53
12:47	12:59	126	125	5.52
12:59	13:12	126	125	5.52
Average		126.0	125	5.52
Cal gas value		128.0	125	5.55
CGA accuracy		1.6%	0.0%	0.5%

High-level CGA:

Start time	End time	NO	CO	O2
13:16	13:27	268	274	9.05
13:27	13:39	268	274	9.05
13:40	13:52	269	274	9.05
Average		268.3	274	9.05
Cal gas value		270.0	274	9.13
CGA accuracy		0.6%	0.0%	0.9%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: Crude and Vacuum Heater NOx

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas11 (NOx) and Magnos 106 (O2)

Constituents monitored (w/ranges): NOx (0-100) O2 (0-10%)

Date CGA performed: 4/14/2011

Performed by: Doug Pek and Bryan Longtine

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-132	NO	low	EB0014057	01/24/13	25.4	ppm
76-188-219	O2	low	EB0004459	05/09/11	5.48	%
76-188-132	NO	mid	EB0024532	02/18/13	53.1	ppm
76-188-215	O2	mid	SA2473	01/09/12	9.02	%

Low-level CGA:

Start time	End time	NO	O2
10:19	10:32	24.7	5.66
10:32	10:44	24.9	5.66
10:44	10:56	25	5.68
Average		24.9	5.67
Cal gas value		25.4	5.48
CGA accuracy		2.10%	3.41%

Mid-level CGA:

Start time	End time	NO	O2
10:56	11:09	53	9.1
11:09	11:21	53.0	9.11
11:21	11:33	53.1	9.13
Average		53.0	9.11
Cal gas value		53.1	9.02
CGA accuracy		0.13%	1.03%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: CCR Charge Heater

Analyzer Manufacturer: ABB

Analyzer model #'s: URAS 14 (CO) and Magnos 106 (O2)

Constituents monitored (w/ranges): CO (0-500) and O2 (0-10%)

Date CGA performed: 6/14/2011

Performed by: Theo Taylor and Eric Justa

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-166	CO	low	EB0004205	09/01/12	125	ppm
76-188-166	O2	low	EB0004205	09/01/12	4.98	%
76-188-165	CO	mid	EB0022817	01/04/14	272	ppm
76-188-165	O2	mid	EB0022817	01/04/14	8.98	%

Low-level CGA:

Start time	End time	CO	O2
9:37	9:46	123	5.02
9:46	9:55	123	5.02
9:55	10:04	123	5.02
Average		123	5.02
Cal gas value		125.0	4.98
CGA accuracy		1.6%	0.8%

Mid-level CGA:

Start time	End time	CO	O2
10:04	10:13	269	8.99
10:13	10:22	269	8.99
10:22	10:31	269	8.99
Average		269	8.99
Cal gas value		272	8.98
CGA accuracy		1.1%	0.1%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: SRU Thermal Oxidizer SO2

Analyzer Manufacturer: ABB Advance Optima

Analyzer model #'s: LIMAS-11-UV (SO2) and MAGNOS 106/206 (O2)

Constituents monitored (w/ranges): SO2 (0-500) O2 (0-10%)

Date CGA performed: 6/21/2011

Performed by: Eric Justa and Doug Pek

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	SO2	low	EB0027779	01/31/13	129.0	ppm
76-188-219	O2	low	EB0027779	01/31/13	5.50	%
76-188-231	SO2	mid	CC316237	01/31/13	279	ppm
76-188-215	O2	mid	CC316237	01/31/13	9.01	%

Low-level CGA:

Start time	End time	SO2	O2
10:20	10:29	123.7	5.50
10:29	10:38	123.7	5.50
10:38	10:47	123.7	5.50
Average		123.7	5.50
Cal gas value		129	5.5
CGA accuracy		4.1%	0.0%

Mid-level CGA:

Start time	End time	SO2	O2
10:48	10:57	265.4	8.99
10:57	11:06	265.2	8.99
11:06	11:15	265.1	8.99
Average		265.2	8.99
Cal gas value		279	9.0
CGA accuracy		4.9%	0.2%

Cylinder Gas Audit (CGA) Datasheet

Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: East Plant Fuel Gas

Analyzer: West Plant Fuel Gas

Analyzer Manufacturer: ABB

Analyzer Manufacturer: ABB

Analyzer model #'s: 2000 VISTA II

Analyzer model #'s: 2000GC

Constituents monitored
(w/ranges): H2S (0-300)

Constituents monitored
(w/ranges): H2S (0-300)

Date CGA performed: 4/19/2011

Date CGA performed: 4/26/2011

Performed by: Theo Taylor and Bryan Longtine

Performed by: Eric Justa and Doug Pek

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-017	H2S	low	EB0028210	02/22/12	76.6	ppm
76-188-019	H2S	mid	EB0024602	11/09/11	162	ppm

East Plant Fuel Gas

Low-level CGA:

Start time	End time	H2S
10:14	10:19	71.9
10:19	10:24	71.9
10:24	10:29	71.4
Average		71.7
Cal gas value		76.6
CGA accuracy		6.4%

Mid-level CGA:

Start time	End time	H2S
10:34	10:39	156
10:39	10:44	156
10:44	10:49	156
Average		156
Cal gas value		162
CGA accuracy		3.6%

West Plant Fuel Gas

Low-level CGA:

Start time	End time	H2S
9:45	9:50	77.0
9:50	9:54	77.3
9:54	9:58	77.4
Average		77.2
Cal gas value		76.6
CGA accuracy		0.8%

Mid-level CGA:

Start time	End time	H2S
10:02	10:05	167
10:05	10:09	167
10:09	10:12	167
Average		167
Cal gas value		162
CGA accuracy		3.0%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LLC - Michigan Refining Division

Analyzer: FCCU Regenerator exhaust CEMS

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas 11 (SO2/NOx), Magnos 106 (O2), Uras 14 (CO/CO2)

Constituents monitored (w/ranges): SO2 (0-200), NOx (0-200), CO (0-1000), CO2 (0-20%), O2 (0-10%)

Date CGA performed: 5/24/2011 & 6/21/2011 (High-level NO only)*

Performed by: Doug Pek and Eric Justa
 Bryan Longtine (High-level NO only)

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-218	SO2	low	EB0014006	11/15/13	47.7	ppm
76-188-218	NO	low			49.6	ppm
76-188-218	CO	low			247	ppm
76-188-218	CO2	low			6.53	%
76-188-219	O2	low	EB0023159	06/15/13	5.54	%
76-188-213	SO2	mid	EB0013910 & EB0025464 (NO only)	3/16/2013 & 2/2/2013 (NO only)	111	ppm
76-188-213	NO	mid			119	ppm
76-188-213	CO	mid			544	ppm
76-188-213	CO2	mid			12.2	%
76-188-215	O2	mid	EB0003822	06/17/12	8.99	%
76-188-215	NO2	mid			99.2	ppm

Low-level CGA:

Start time	End time	SO2	NO	CO	CO2	O2
10:13	10:25	45.8	50.7	255	6.73	5.54
10:25	10:38	45.8	49.8	255	6.73	5.54
10:38	10:50	46.8	49.4	255	6.73	5.54
Average		46	50	255	6.73	5.54
Cal gas value		47.7	49.6	247.0	6.53	5.54
CGA accuracy		3.3%	0.7%	3.2%	3.1%	0.0%

Mid-level CGA:

Start time	End time	SO2	NO	CO	CO2	O2
10:52	11:04	111.2	119.1	547	12.2	8.99
11:04	11:17	111.3	119	547	12.2	8.99
11:17	11:29	111.2	119.1	547	12.2	8.99
Average		111	119	547	12.2	8.99
Cal gas value		111	119.1	544	12.2	8.99
CGA accuracy		0.2%	0.0%	0.6%	0.0%	0.0%

* The original bottle mix was ordered incorrectly with the NO high-level range set at 100 ppm - 200 ppm when it should have been set at 100 ppm - 120 ppm. Another bottle was used for the high-level NO until the corrected bottle comes in.

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: FCC Charge Heater

Analyzer Manufacturer: ABB

Analyzer model #'s: URAS 14 (CO) and Magnos 106 (O2)

Constituents monitored (w/ranges): CO (0-500) and O2 (0-10%)

Date CGA performed: 5/17/2011

Performed by: Doug Pek and Eric Justa

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-166	CO	low	CC275870	03/20/12	124	ppm
76-188-166	O2	low	CC275870	03/20/12	5.08	%
76-188-165	CO	mid	CC176415	12/22/13	273	ppm
76-188-165	O2	mid	CC176415	12/22/13	9.00	%

Low-level CGA:

Start time	End time	CO	O2
9:37	9:46	125	5.08
9:46	9:55	125	5.08
9:55	10:04	125	5.08
Average		125	5.08
Cal gas value		124	5.08
CGA accuracy		0.6%	0.0%

Mid-level CGA:

Start time	End time	CO	O2
10:04	10:13	274	8.98
10:13	10:22	274	8.98
10:22	10:31	274	8.98
Average		274	8.98
Cal gas value		273	9.00
CGA accuracy		0.3%	0.2%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: Zurn Boiler NOx and O2

Analyzer Manufacturer: Horiba (NOx) and Yokagowa (O2)

Analyzer model #'s: ENDA-1120 (NOx) and ZA8 (O2)

Constituents monitored (w/ranges): NOx (0-500) O2 (0-10%)

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	NO	low	CC320264	01/08/12	128	ppm
76-188-219	O2	low	109-06-03330	05/27/12	2.00	%
76-188-231	NO	mid	EB0009809	08/13/11	268	ppm
76-188-215	O2	mid	MA116181	01/20/14	8.00	%

NOx Analyzer

Date CGA performed: 5/11/2011

Performed by: Theo Taylor and Eric Justa

Low-level CGA:

Start time	End time	NO
9:32	9:41	128
9:41	9:50	128
9:50	9:59	128
Average		128
Cal gas value		128.0
CGA accuracy		0.0%

Mid-level CGA:

Start time	End time	NO
9:59	10:08	270
10:08	10:17	271
10:17	10:26	272
Average		271
Cal gas value		268
CGA accuracy		1.1%

O2 Analyzer

Date CGA performed: 5/11/2011

Performed by: Theo Taylor and Eric Justa

Low-level CGA:

Start time	End time	O2
10:47	10:49	1.91
10:49	10:51	1.94
10:51	10:53	1.96
Average		1.94
Cal gas value		2.00
CGA accuracy		3.2%

Mid-level CGA:

Start time	End time	O2
10:52	10:54	8.2
10:54	10:56	8.20
10:56	10:58	8.20
Average		8.20
Cal gas value		8.00
CGA accuracy		2.5%

Appendix D

Excess Emission Report

Excess Emission Report
Second Quarter 2011
Marathon Petroleum Company LLC - Michigan Refining Division
Time Periods are Approximate

SRU Thermal Oxidizer

Start Date/Time*	End Date/Time*	Duration of Downtime (hrs)	Equipment	Emissions (ppm 12 hr ave)**	Cause	Corrective Action
6/11/11 12:00 AM	6/11/11 1:00 AM	1	SRU Thermal Oxidizer	278	On June 10, 2011 the Gas Con experienced an upset condition which required the FCCU Regenerator (FCCU) to be shut down. The FCCU was shut down per unit shutdown procedures. The shutdown resulted in carry over from the FCCU to the East Plant Fuel Gas and the SRU. This carryover caused excess emissions from the Fuel Gas system and the SRU Thermal Oxidizer.	The unit was brought back on line and conditions stabilized.
6/11/11 1:00 AM	6/11/11 2:00 AM	1	SRU Thermal Oxidizer	294		
6/11/11 2:00 AM	6/11/11 3:00 AM	1	SRU Thermal Oxidizer	300		
6/11/11 3:00 AM	6/11/11 4:00 AM	1	SRU Thermal Oxidizer	302		
6/11/11 4:00 AM	6/11/11 5:00 AM	1	SRU Thermal Oxidizer	304		
6/11/11 5:00 AM	6/11/11 6:00 AM	1	SRU Thermal Oxidizer	304		
6/11/11 6:00 AM	6/11/11 7:00 AM	1	SRU Thermal Oxidizer	296		
6/11/11 7:00 AM	6/11/11 8:00 AM	1	SRU Thermal Oxidizer	291		
6/11/11 8:00 AM	6/11/11 9:00 AM	1	SRU Thermal Oxidizer	288		
6/11/11 9:00 AM	6/11/11 10:00 AM	1	SRU Thermal Oxidizer	276		
6/13/11 1:00 PM	6/13/11 2:00 PM	1	SRU Thermal Oxidizer	261		
6/13/11 2:00 PM	6/13/11 3:00 PM	1	SRU Thermal Oxidizer	275		
6/13/11 3:00 PM	6/13/11 4:00 PM	1	SRU Thermal Oxidizer	280		
6/13/11 4:00 PM	6/13/11 5:00 PM	1	SRU Thermal Oxidizer	277		
6/13/11 5:00 PM	6/13/11 6:00 PM	1	SRU Thermal Oxidizer	275		
6/13/11 6:00 PM	6/13/11 7:00 PM	1	SRU Thermal Oxidizer	270		
6/13/11 7:00 PM	6/13/11 8:00 PM	1	SRU Thermal Oxidizer	255		
6/22/11 1:00 AM	6/22/11 2:00 AM	1	SRU Thermal Oxidizer	251	On June 21, 2011 the TGTU #1 had a loss of flame in the heater which resulted in excess SO2 emissions from the SRU Thermal Oxidizer on June 22, 2011.	The unit was brought back on line and conditions stabilized.
6/22/11 2:00 AM	6/22/11 3:00 AM	1	SRU Thermal Oxidizer	269		
6/22/11 3:00 AM	6/22/11 4:00 AM	1	SRU Thermal Oxidizer	277		
6/22/11 4:00 AM	6/22/11 5:00 AM	1	SRU Thermal Oxidizer	283		
6/22/11 5:00 AM	6/22/11 6:00 AM	1	SRU Thermal Oxidizer	286		
6/22/11 6:00 AM	6/22/11 7:00 AM	1	SRU Thermal Oxidizer	287		
6/22/11 7:00 AM	6/22/11 8:00 AM	1	SRU Thermal Oxidizer	290		
6/22/11 8:00 AM	6/22/11 9:00 AM	1	SRU Thermal Oxidizer	293		
6/22/11 9:00 AM	6/22/11 10:00 AM	1	SRU Thermal Oxidizer	295		
6/22/11 10:00 AM	6/22/11 11:00 AM	1	SRU Thermal Oxidizer	296		
6/22/11 11:00 AM	6/22/11 12:00 PM	1	SRU Thermal Oxidizer	297		
6/22/11 12:00 PM	6/22/11 1:00 PM	1	SRU Thermal Oxidizer	260		
Total		29				
Operating Hours		2184				
% Excess Emissions		1.33				

*The start time and end time are approximate.

**Emission limit is 250 ppm SO2 (12 hour average)